

1 In the claims:

2 1. A system for customer-side market segmentation while preventing
3 disclosure of sensitive customer information, comprising:
4 a non-merchant-controlled device having a means for customer categorization, the
5 categorization being based on a business-specific decision procedure and stored customer
6 information, wherein the customer information is kept private from merchants based on
7 specified criteria;

8 a first merchant-controlled means for providing the business-specific decision
9 procedure to the non-merchant-controlled device; and

10 a second merchant-controlled means for receiving a category code from the non-
11 merchant-controlled device.

12 2. The system as recited in claim 1, further comprising customer-controlled
13 means for specifying the criteria used to keep information private.

14 3. The system as recited in claim 1, wherein the business-specific decision
15 procedure is provided to the non-merchant-controlled device over a public, global
16 communication network and the category code is also sent over the public, global
17 communication network from the non-merchant-controlled device.

18 4. The system as recited in claim 1, wherein the first and second merchant-
19 controlled means are integrated as one physical unit as a promotional device.

20 5. The system as recited in claim 1, wherein the non-merchant-controlled
21 device is a customer-controlled device.

22 6. The system as recited in claim 1, wherein the non-merchant-controlled
23 device is a third-party-controlled device.

24 7. The system as recited in claim 6, wherein customer identification is
25 masked to prevent identification of the customer by a merchant.

26 8. The system as recited in claim 6, wherein the first merchant-controlled
27 means selects the third-party-controlled device from a plurality of third-party devices
28 based on customer preferences.

29 9. The system as recited in claim 1, wherein the first merchant-controlled
30 means device provides identification information to the non-merchant-controlled device,
31 and wherein the non-merchant-controlled device utilizes configurable safeguards
32 combined with the provided identification to prevent undesirable release of customer
33 information.

10. The system as recited in claim 9, wherein the identification information uses an identity token.

11. The system as recited in claim 9, wherein the identification information uses a digital certificate.

12. The system as recited in claim 1, wherein the first merchant-controlled means device further comprises a proximity detector for detecting the presence of a non-merchant-controlled device.

13. The system as recited in claim 1, wherein the non-merchant-controlled device queries the customer for additional information responsive to receipt of the business-specific decision procedure.

14. The system as recited in claim 13, wherein the non-merchant-controlled device comprises a portable device and a personal computer (PC), the PC providing means for entering additional information requested by the query, wherein the additional information entered into the PC is transferred to the portable device at the request of the customer, and wherein the portable device is used for interaction with the promotional device.

15. The system as recited in claim 1, wherein the non-merchant-controlled device further comprises means for performing sensitivity analysis on the business-specific decision procedure, thereby determining whether sensitive information is to be revealed to a merchant based on the categorization.

16. The system as recited in claim 1, wherein the business-specific decision procedure masks rules and resulting categories to prevent reverse-engineering of the decision procedure.

17. The system as recited in claim 1, further comprising means for providing promotional material to a customer.

18. The system as recited in claim 17, wherein the means for providing promotional material comprises a printing device.

19. The system as recited in claim 1, wherein the non-merchant-controlled device is a customer-controlled personal digital assistant (PDA).

20. The system as recited in claim 19, wherein the non-merchant-controlled device queries the customer for additional information responsive to receipt of a business-specific decision procedure, and wherein the PDA provides means for entering additional information requested by the query.

1 21. A method for customer-side market segmentation, said method comprising
2 steps of:

3 receiving a business-specific decision procedure by a non-merchant-controlled
4 device;

5 executing a categorizer on the non-merchant-controlled device, the categorizer
6 using the received business-specific decision procedure and a set of stored customer-
7 specific information, the executing resulting in an identified customer category; and
8 providing the identified customer category.

9 22. The method of claim 21, further comprising:
10 providing promotional material to the customer by a business, wherein the
11 business provides the business-specific decision procedure received by the non-merchant-
12 controlled device, and wherein the promotional material is customized based on the
13 identified customer category.

14 23. The method of claim 22, wherein the promotional material is selected from
15 a group consisting of discount coupons, advertisements, product information, business
16 information; competitor comparisons, product comparisons, special offers and feedback
17 requests.

18 24. The method of claim 22, wherein promotional information is printed at a
19 business location and provided to a customer shopping at the business location.

20 25. The method as recited in claim 22, wherein the non-merchant-controlled
21 device is a customer-controlled device.

22 26. The method of claim 25, wherein promotional information is displayed on
23 the customer-controlled device.

24 27. The method of claim 21, further comprising steps of:
25 querying the customer for additional information by the non-merchant-controlled
26 device, responsive to receiving a business-specific decision procedure; and
27 inputting additional information by the customer, wherein the additional
28 information is added to the stored customer-specific information for use by the
29 categorizer.

30 28. The method of claim 21, further comprising steps of:
31 capturing additional information related to the customer, wherein the additional
32 information comprises at least one item selected from the group consisting of customer
33 behavior, outside factors, and customer mode; and

expanding the stored customer-specific information with the additional information, wherein the additional information is used by the categorizer to provide an updated customer category.

29. The method as recited in claim 21, wherein the non-merchant-controlled device is a third-party controlled device.

30. The method of claim 29, further comprising:
providing promotional material to the customer by a business, wherein the business provides the business-specific decision procedure received by the third-party-controlled device, and wherein the promotional material is customized based on the identified customer category.

31. The method as recited in claim 21, further comprising steps of:
performing sensitivity analysis on the decision procedure to safeguard sensitive information, by the customer.

32. A computer readable medium containing code sections for categorizing a customer, said medium comprising:

a first code section for receiving a business-specific rule set from a business;
a second code section for inputting customer-specific information and storing said information in memory;

a third code section for categorizing a customer, wherein the categorizing code section uses the business-specific rule set received by the receiving code section and customer-specific information stored in memory, said categorization resulting in a customer category; and

a fourth code section for sending the customer category to the business, wherein the sending guards the customer-specific information stored in memory from being sent to the business.

33. A computer readable medium containing code sections for use in a promotional device utilizing customer categories, said medium comprising:

a first code section for detecting a customer-controlled categorization device;
a second code section for sending a business-specific rule set to the customer-controlled categorization device; and

a third code section for receiving a customer category from the customer-controlled categorization device, wherein the categorization uses the business-specific rule set sent by the business and customer-specific information stored in memory in the customer-controlled categorization device.

1 34. The computer readable medium as recited in claim 33, further comprising
2 a fourth code section for determining a preferred action based on the customer category
3 received.

20/09/2024 10:30:00